03.01-07/17/95-00487

(804) 322-4778

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NOAA Coastal Resource Coordinator
c/o U.S Environmental Protection Agency
Region III
Attn: Mr. Peter Knight (Mail Code 3HW02)
841 Chestnut Street
Philadelphia, Pennsylvania 19107

Re: Contract N62470-89-D-4814, Contract Task Order (CTO) 0252 Comment Responses for the Draft Summary of Background Constituent Concentrations & Characterization of the Biotic Community from the York River Drainage Basin, Naval Weapons Station Yorktown, Yorktown, VA V

Dear Mr. Knight:

The Navy is pleased to provide a copy of the responses to comments on the subject report for your review and comment. Because comments on the Background Report by NOAA can be addressed by these comment responses, a Final Background Report will be submitted in lieu of a Draft Final submittal on July 24, 1995. This is required because this report is referenced in the Site 16 and SSA-16 Remedial Investigation/Baseline Risk Assessment Report (RI/BLRA).

Changes to the Site Management Plan schedule for Site 16 and SSA-16 have been made and approved by the regulators in order to expedite the Record of Decision for these sites. Thus, the Final RI/BLRA and the Final Proposed Plan for these two sites will also be received on July 24, 1995. The 45-day public comment period for the Proposed Plan will begin on July 25, 1995. It is our intention to follow the public comment period with a Final Record of Decision for these two sites no later than September 29, 1995.

If you have any questions concerning these responses to your comments on the Final Background Report, please contact Mrs. Brenda R. Norton, P.E. as soon as possible at (804) 322-4778.

Sincerely,

Nina M. Johnson, P.E.
Head
Installation Restoration
Section (South)
Environmental Programs Branch
Environmental Quality Division
By direction of the Commander

Blind copy to: (w/encl)
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Response to Comments Submitted by NOAA
On the Draft Background Report
Naval Weapons Station Yorktown
Yorktown, Virginia
NOAA Comment Letter dated June 2, 1995

General Comments

1) Seasonal migration and emergence were considered in the sampling program conducted for Sites 6, 7, 12, 16, SSA 16 and Background. During future site investigations, fish and benthic sampling will be conducted during the same season (summer) that background locations were sampled. Additionally, background biota samples will be stratified by habitat type and physical parameters as part of the site-specific ecological risk assessment process.

2) In general, concentrations of inorganic constituents detected in distinct soil associations do not appear to differ significantly. However a statistical evaluation of significant differences was not conducted for the different soil associations. The comparison will be included as part of WPNSTA RI reports in addition to consideration of the aluminum and iron concentrations as normalizing factors. Physical parameters such as grain size and TOC were not analyzed for soils as part of the Background Study.

3) Comment acknowledged. An inherent limitation in the development of a statistical background study is the number of samples necessary to adequately characterize concentrations of all inorganic constituents in complex environmental media. For example, selecting an inorganic such as beryllium which has higher relative variability results in the need for hundreds of samples to achieve a power of 80 percent and an alpha of 5 percent (i.e., 95 percent confidence). Furthermore, samples having non-detect values (as is sometimes the case with trace metals such as nickel and chromium) complicate data manipulation and can affect the total number of samples necessary for an adequate characterization of background.

4) Arsenic and manganese are discussed at length due to their potentially toxic nature and ubiquitous presence in environmental media at WPNSTA Yorktown. The underlying distribution of elements among the different soil types does not appear to be derived from a normal distribution. Statistical analyses of the distributions observed in the five soil associations will not be attempted at this time because of the limited numbers of samples per association.

5) Methylene Chloride and acetone are common laboratory contaminants. In addition to this, they are both quite volatile and are thus not expected to be found in surface soils. A discussion of this and the blank data associated with these samples will be included in the report.